

Work Order ID 157331

Tuesday, February 21, 2017 12:54:01 PM

157331

Page 1

Item ID: D350-591-214 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Heli-Access-Step™ RH - High Gear, Short Step, Aerazur Float Compatible
 Start Date: 2/23/2017 Start Qty: 4.00 ***4*** **5** **MCS** Cust Item ID:
 Required Date: 3/7/2017 Req'd Qty: 4.00 ***4*** Customer:
 Reference: 24-3-2017 mf.
 7-4-2017 mf.

Approvals: Process Plan: **DAS 21** Date: FEB 22 2017 Tooling: Date: Run Start ***NR1***
 QC: **9-89** Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr								
IIN-D350-591	H	DAS 6 9-89	MAR 1 2017	0.00				DAS 21 9-89	160373

100 Document Control **DAS 27**
100 **9-89** **5** **MAR 13 2017**
 DC DOCUMENT CONTROL
 Memo 0.00
 Doc.Control -USB or Paperwork Photocopy bluefile and type labels as per PPP D350-591-214 CHG005

270 Pick Kit 0.00
270
 Packaging Memo 0.01
 Packaging

280 QC4- 100% Inspect kits for completeness 0.00
280
 QC Memo 0.02
 Quality Control

B# 156611 x 5 x RH

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																																													
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<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="3" style="text-align: left;">Root Cause</th> <th colspan="3" style="text-align: left;">FAULT CATEGORY</th> </tr> </thead> <tbody> <tr> <td style="width:15%;">Environment ☐</td> <td style="width:15%;">No Re-verification ☐</td> <td style="width:15%;">Pressure/Forced ☐</td> <td style="width:15%;">Temperature/Cure ☐</td> <td style="width:15%;">Power Loss/Surge ☐</td> <td style="width:15%;">Positioned Wrong ☐</td> </tr> <tr> <td>Design ☐</td> <td>Operator ☐</td> <td>Bending ☐</td> <td>Set-up ☐</td> <td>Folio/Program ☐</td> <td>Outside Dimensions ☐</td> </tr> <tr> <td>Doc/Data ☐</td> <td>Offset/Setup ☐</td> <td>Centre Not Concentric ☐</td> <td>BOM/Route ☐</td> <td>Grain ☐</td> <td>Over/Under tolerance ☐</td> </tr> <tr> <td>Equip/Tooling ☐</td> <td>Supplier ☐</td> <td>Cracks ☐</td> <td>Broken/Damage/Defect ☐</td> <td>Weld ☐</td> <td>Part Incorrect ☐</td> </tr> <tr> <td>Handling/Pre ☐</td> <td>Training ☐</td> <td>Crimp/Kink/Ripple/Wave ☐</td> <td>Inspection Incomplete/Unqualified ☐</td> <td>Wrong Stock Pulled ☐</td> <td>Part Lost/Missing ☐</td> </tr> <tr> <td>Material ☐</td> <td>Use for Testing ☐</td> <td>Cuffs ☐</td> <td>Contamination ☐</td> <td>Out of Sequence ☐</td> <td>Part Moved ☐</td> </tr> <tr> <td>Internal Transport ☐</td> <td>Poor Information ☐</td> <td>Crushing ☐</td> <td>Countersink ☐</td> <td>Off-set ☐</td> <td>Drawing ☐</td> </tr> <tr> <td>Tribal Knowledge ☐</td> <td>Rushing ☐</td> <td>Heat Treat ☐</td> <td>Cut Too Short ☐</td> <td>Mislabeled ☐</td> <td>Finish ☐</td> </tr> <tr> <td>LOA ☐</td> <td>Product Improvement ☐</td> <td>Wave/Twist in Tube ☐</td> <td>Instructions Incomplete/Unclear ☐</td> <td>Fit/Function ☐</td> <td>Misread ☐</td> </tr> <tr> <td>Substation ☐</td> <td>Process Improvement ☐</td> <td>Marks/Chatter ☐</td> <td>Drill Holes ☐</td> <td>Misaligned/off center ☐</td> <td>Turning Sequence ☐</td> </tr> <tr> <td>Past Expiry Date ☐</td> <td>Manufacturing Process ☐</td> <td colspan="4" rowspan="2" style="vertical-align: top;">OTHER : _____</td> </tr> <tr> <td>Misidentified ☐</td> <td>Past Due ☐</td> </tr> </tbody> </table>						Root Cause			FAULT CATEGORY			Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____				Misidentified ☐	Past Due ☐
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157331

Page 2

Item ID: D350-591-214

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Heli-Access-Step™ RH - High Gear, Short Step, Aerazur Float Compatible

Start Date: 2/23/2017 Start Qty: 4.00

4

Cust Item ID:

Required Date: 3/7/2017 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

290

0.00

290

Packaging

Packaging

Memo

0.00

Identify and pack for shipping as per PPP D350-591-214
Location:FG0395
DAS
27
9-89
APR 05 2017

300

0.00

300

QC

Quality Control

QC21- Final Inspection - Work Order Release

Memo

0.07

DAS
21
9-89

APR 05 2017

DAS
21
9-89

APR 05 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : ☐					

Picklist Print

Tuesday, February 21, 2017 12:54:07 PM

Page 1

Work Order ID: 157331

157331

Parent Item: D350-591-214

D350-591-214

Parent Item Name: Heli-Access-Step™ RH - High Gear, Short Step, Acrazur Float Compatible

Start Date: 2/23/2017

Required Date: 3/7/2017

Start Qty: 4.00

Required Qty: 4.00

Comments:

IPP Rev:B05.10.14Modified step 10KJ/EC
 IPP Rev:C 06-06-19 Added D2732-030 AS PER DSI9294 JLM
 IPP Rev:C 06-06-27 Revised as per DSI9340 JLM IPP Rev:D
 10.11.15 update qty on AN4-11A DD verf:EC IPP REV:E 14.12.17
 ADD DSI9712-011 DD VERF:JLM IPP REV:F 16.03.16 IIN
 REV.H DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3338-1 *D3338-1* Mounting Lug		Manufactured	No			270	Each	6.0000	1	45			
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST527				6					
				155193				6					
D3078-042 *D3078-042* Step Assembly, Hi Short RH		Manufactured	No			270	Each	0.0000	1	45			
D2230-3 *D2230-3* Mounting Lug		Manufactured	No			270	Each	194.0000	2	810			
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				FG				6					
				109344				4					
				89045				2					
				ST321				80					
				154877				80					
				ST521				108					
				151426				76					
				153925				32					

DAS
27
9-89

MAR 13 2017

DAS
28
9-89

MAR 13 2017

DAS
28
9-89

MAR 13 2017

IS
3
89

DAS
27
9-89

DAS
27
9-89

15H49x4
156731x1

B156611

10

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Picklist Print

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Page 2

Work Order ID: 157331

157331

Parent Item: D350-591-214

D350-591-214

Parent Item Name: Heli-Access-Step™ RH - High Gear, Short Step, Aerazur Float Compatible

Start Date: 2/23/2017

Required Date: 3/7/2017

Start Qty: 4.00

Required Qty: 4.00

D2618

Manufactured No

270 Each

54.0000 2

8/10

D2618

Bushing

**

MAR 13 2017

DAS 6 28 9-89

DAS 27 9-89

Location

Loc Qty

Loc Code

ST008A

54

151954

54

156860x8

D2732

Manufactured No

270 f

286.0015 1

4/5

***D2732*-30**

Rubber Cushion (\$per foot)

**

MAR 13 2017

DAS 6 28 9-89

DAS 27 9-89

Location

Loc Qty

Loc Code

ST412

286.0014694

117118

5E-10

150042

286.001469

151138x2
151143x16
8/10

D3235-1

Manufactured No

270 Each

52.0000 2

8/10

D3235-1

Mounting Lug

**

MAR 13 2017

DAS 6 28 9-89

DAS 27 9-89

Location

Loc Qty

Loc Code

ST522

52

152214

2

153929

50

156730x8

AN3-35A

Purchased No

270 Each

62.0000 2

8/10

AN3-35A

Bolt

**

MAR 13 2017

DAS 6 28 9-89

DAS 27 9-89

Location

Loc Qty

Loc Code

FG

10

122800

10

ST348

52

m136192

22

m136406

30

136983x8

2

Tuesday, February 21, 2017 12:54:07 PM

Shop Packet Print

Page 2

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
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Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
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Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐	OTHER :							

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Parent Item Name: Heli-Access-Step™ RH - High Gear, Short Step, Aerazur Float Compatible

Start Date: 2/23/2017

Required Date: 3/7/2017

Start Qty: 4.00

Required Qty: 4.00

AN4-15A Purchased No

270 Each 329.0000 4 16 20

AN4-15A

Bolt

**

MAR 13 2017

DAS 28 6 9-89

DAS 27 9-89

Location

Loc Qty

Loc Code

GA

10

120449

10

ST343

319

m135859

319

270 Each

77.0000

2

8 10

**

MAR 13 2017

DAS 28 6 9-89

AN5-36A Purchased No

AN5-36A

Bolt

DAS 27 9-89

Location

Loc Qty

Loc Code

over004

40

M136866

40

ST336

37

M136579

37

270 Each

1,027.000

4

16 20

**

MAR 13 2017

DAS 28 6 9-89

NAS1149D0363J Purchased No

NAS1149D0363J

Washer

DAS 27 9-89

Location

Loc Qty

Loc Code

GA

197

m134055

197

ST263

830

m136318

23

m136781

807

20

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

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				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
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Parent Item Name: Heli-Access-Step™ RH - High Gear, Short Step, Aerazur Float Compatible

Start Date: 2/23/2017

Required Date: 3/7/2017

Start Qty: 4.00

Required Qty: 4.00

NAS1149D0463J

Purchased

No

270

Each

2,948.000

12

48.60

NAS1149D0463.J

Washer

**

MAR 13 2017

DAS 28 9-89

DAS 27 9-89

Location

Loc Qty

Loc Code

GA	80	
M134508	13	
M135056	67	
ST260a	1000	
M136838	1000	
ST263	1868	
M136665	1868	

NAS1149D0563J

Purchased

No

270

Each

632.0000

4

16.20

NAS1149D0563.J

Washer

**

MAR 13 2017

DAS 28 9-89

DAS 27 9-89

Location

Loc Qty

Loc Code

GA	187	
m135774	187	
ST263	445	
m136295	445	

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Picklist Print

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Page 5

Work Order ID: 157331

157331

Parent Item: D350-591-214

D350-591-214

Parent Item Name: Heli-Access-Step™ RH - High Gear, Short Step, Aerazur Float Compatible

Start Date: 2/23/2017

Required Date: 3/7/2017

Start Qty: 4.00

Required Qty: 4.00

MS21042L3

Purchased

No

270

Each

2,227.000

2

8-10

MS21042L3

Nut

**

MAR 13 2017

DAS
27
9-89

Location Loc Qty Loc Code

FP001 100

m135945 100

GA 318

m134360 108

m135135 18

M136665 192

OVER007 300

m134360 0

M136665 300

ST303 509

M136406 9

M136554 500

ST3030 1000

M136838 1000

10

MS21042L4

Purchased

No

270

Each

2,411.000

6

24 30

MS21042L4

Nut

**

MAR 13 2017

DAS
27
9-89

Location Loc Qty Loc Code

FP001 18

m133363 18

GA 187

m135058 187

OVER007 1500

m136450 500

m136838 1000

ST303 706

m136648 706

30

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6
9-89

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28
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DAS
6
9-89

DAS
28
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition					
				Completed By					
				Lead hand / Supervisor Approval Verification					
				QC / QA Coordinator Approval					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐								
		OTHER : _____							

Picklist Print

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Page 6

Work Order ID: 157331

157331

Parent Item: D350-591-214

D350-591-214

Parent Item Name: Heli-Access-Step™ RH - High Gear, Short Step, Aerazur Float Compatible

Start Date: 2/23/2017

Required Date: 3/7/2017

Start Qty: 4.00

Required Qty: 4.00

MS21042L5

Purchased

No

270

Each

284.0000

2

~~810~~

MS21042L5

Nut

MAR 13 2017

DAS
27
9-89

Location

Loc Qty

Loc Code

GA

21

m127813

21

OVER007

100

m136866

100

ST303

163

m136450

100

m136740

63

10

DAS
28
0.00
DAS
6
89

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Page 6

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
				Completed By 					
				Lead hand / Supervisor Approval Verification 					
				QC / QA Coordinator Approval 					

Root Cause				FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due	☐ Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter	☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes	☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center	☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence		
☐ OTHER : _____							

Qty -213	Qty -214	Qty -215	Qty -216	Qty -311	Qty -312	Part Number	Description
X						D350-591-213	Heli-Access-Step™, Short Step – High Skid, LH
	X					D350-591-214	Heli-Access-Step™, Short Step – High Skid, RH
		X				D350-591-215	Heli-Access-Step™, Short Step – Low Skid, LH
			X			D350-591-216	Heli-Access-Step™, Short Step – Low Skid, RH
				X		D350-591-311	Heli-Access-Step™, Long Step – High Skid, LH
					X	D350-591-312	Heli-Access-Step™, Long Step – High Skid, RH
1						D3078-041	STEP ASSEMBLY (HIGH-SHORT, LH)
	1					D3078-042	STEP ASSEMBLY (HIGH-SHORT, RH)
		1				D3168-041	STEP ASSEMBLY (LOW-SHORT, LH)
			1			D3168-042	STEP ASSEMBLY (LOW-SHORT, RH)
				1		D3272-041	STEP ASSEMBLY (HIGH-LONG, LH)
					1	D3272-042	STEP ASSEMBLY (HIGH-LONG, RH)
2	2	2	2	4	4	D2230-3	MOUNTING LUG
2	2	2	2	2	2	D2618	BUSHING
4	4	4	4			D2732-030	CUSHION
				2	2	D2856-400-720	ABRASION STRIP
2	2	2	2	2	2	D3235-1	MOUNTING LUG
				1	1	D3278-041	SUPPORT ASSEMBLY
2	2	2	2	2	2	AN3-35A	BOLT
				8	8	AN4-13A	BOLT
4	4	4	4			AN4-15A	BOLT
2	2	2	2	2	2	AN5-36A	BOLT
4	4	4	4	4	4	NAS1149D0363J	WASHER (AN960JD10)
12	12	12	12	16	16	NAS1149D0463J	WASHER (AN960JD416)
4	4	4	4	4	4	NAS1149D0563J	WASHER (AN960JD516)
2	2	2	2	2	2	MS21042L3	NUT
6	6	6	6	8	8	MS21042L4	NUT
2	2	2	2	2	2	MS21042L5	NUT
				1	1	*DSI 9410-011	STEP MODIFICATION KIT

*DSI 9410-011 Step Modification Kits are provided with all D350-591-311 and D350-591-312 Steps. This kit is provided as an option for the installer and is therefore **NOT REQUIRED** to complete the installation of the D350-591-311 or D350-591-312 Steps. Refer to Figure 15 for installation of the DSI 9410-011 Kit.

REFERENCE ONLY

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS D350-591 REV. G AND
INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D350-591 REV. 3
REF TCCA STC: SH92-6
REF FAA STC: SH967NE

1.0 Purpose

It has come to DART's attention that it may be difficult to fasten the D350-591-133 Aft Maintenance Step and D350-591-213/-214 Heli-Access-Step Installations to the forward crosstube due to variations between crosstubes. For this reason, DART is adding the D3338-1 Mounting Lug to the D350-591-133 Aft Maintenance Step and D350-591-213/-214 Heli-Access-Step Kits at CHG 004 and later.

For D350-591-133 Aft Maintenance Step and D350-591-213/-214 Heli-Access-Step Kits at CHG 003 and earlier, DSI 9712-011 Mounting Lug Kit can be procured from DART. The kit contains all parts to upgrade a single step kit.

2.0 Installation

- 2.1 It is acceptable to install the D3338-1 Mounting Lug in lieu of the D2230-1 Mounting Lug as required to reduce the gap between step and the forward crosstube in accordance with the figures of this service instruction.
- 2.2 The height to set up the D350-591-133 Maintenance Step has been revised from 7.0in to 6.0in $\pm$ 1.0in to provide more flexibility. See sheet 2 of this service instruction.
- 2.3 In all other respects, install the D350-591-133 Aft Maintenance Step and D350-591-213/-214 Heli-Access-Steps in accordance with Section 3.1 of Installation Instructions D350-591 or Section 32.1 of Instructions for Continued Airworthiness ICA-D350-591.

3.0 Parts List Change

The following additional part is provided with D350-591-133 Aft Maintenance Step and D350-591-213/-214 Heli-Access-Steps at CHG 004:

Qty -133	Qty -213	Qty -214	Part Number	Description
X			D350-591-133	Heli-Access-Step™, Aft Maintenance Step
	X		D350-591-213	Heli-Access-Step™, Short Step – High Skid, LH
		X	D350-591-214	Heli-Access-Step™, Short Step – High Skid, RH
1	1	1	D3338-1	MOUNTING LUG (ADD)

4.0 DSI 9712-011 Mounting Lug Kit Parts List

For existing D350-591-133 Aft Maintenance Steps and D350-591-213/-214 Heli-Access-Steps at CHG 003 or earlier, one DSI 9712-011 kit upgrades one step installation:

Qty -011	Part Number	Description
X	DSI 9712-011	Mounting Lug Kit
1	D3338-1	MOUNTING LUG

5.0 Weight and Balance

There is a negligible weight change associated with this modification.

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: 
D. SHEPHERD (DE # 02)

DATE: 14.12.04
CERT. NO.: SH92-6
ISSUE NO.: 11

A	NEW ISSUE	MB	14.10.22
REV.	DESCRIPTION	BY	DATE
DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9712	SHEET 1 OF 3
APPROVED		TITLE	SCALE
DE APPR.		INSTALLATION OPTION	NTS
DATE	14.10.22	COPYRIGHT © 2014 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	